CONSTRAINTS, RESTRAINTS, AND THE ROLE OF AEROSPACE POWER IN THE 21ST CENTURY

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INSS Occasional Paper 38

Aerospace Issues and Planning Series

April 2001

USAF Institute for National Security Studies
USAF Academy, Colorado

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ISBN: 0-9710900-1-7

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FOREWORD

We are pleased to publish this thirtieth-eighth volume in the *Occasional Paper* series of the US Air Force Institute for National Security Studies (INSS). Aerospace power has emerged as a primary military instrument of choice in pursuing national objectives within the complex international security environment entering the 21st century. Changes in the security landscape, the dynamics of sub-theater conflicts, and coalition imperatives combine to place new requirements on aerospace operational planning and the conduct of aerospace operations themselves. Occasional Papers 38 and 39 address, in turn, both political and operational dimensions of aerospace power application today. They are presented both for informational and educational purposes to offer informed perspectives on important aspects of contemporary aerospace operations, to generate informed discussion and to bound productive debate on aerospace power in both supported and supporting roles. In Occasional Paper 38, *Constraints, Restraints, and the Role of Aerospace Power in the 21st Century*, Jeffrey Beene presents a comprehensive examination of the use of aerospace power within tightly restrained conflicts and suggests improvements in doctrine, training, and tools to more effectively employ such power within that environment. Then in Occasional Paper 39, *Aerospace Power in Urban Warfare: Beware the Hornet's Nest*, Peter Hunt examines the employment of aerospace power in the increasingly important urban operational environment. Each of these aspects of aerospace power demands greater thought and examination, and these two occasional papers are presented to help focus that attention.

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JAMES M. SMITH
Director

EXECUTIVE SUMMARY

This study examines aerospace power (e.g., the use of aircraft, spacecraft, and information in the air and/or space medium to project military power in order to create political and military effects) employment in the emerging 21st century strategic environment and evaluates how its capabilities can best be used in tightly restrained conflicts. Now, perhaps more than ever before, it is important for airmen (e.g., any military or military-related practitioner of aerospace power employment) to understand how best to employ aerospace power in pursuit of national objectives. The reason is found in the magnitude of the potential dilemma. While the United States (US) and its military stand on the verge of coming to grips with the incredible potential of aerospace power and the technological means to employ it, the military may be limited from using it in preferred ways and from achieving its fullest potential only in the most extreme cases.

The emerging strategic environment will become more complex with increasing challenges to US national security below the vital interest level. This environment will consist of new threats, new actors, with forces increasingly joined by military allies and agencies outside the military—domestic and foreign. In most of these environments if the US responds militarily it will be limited. Restraints (e.g., political and/or military choices affecting employment of the military instrument short of physical or legal limits that might otherwise be considered achievable, allowable, or acceptable) will be imposed—largely as a function of the conflict's relation to national interests. As a result, the increasing complexities involved in application of the instruments of national power (i.e., political, economic, military, and informational) to achieve national/coalition objectives are such that, as a minimum, these instruments must be better integrated in the future to have a reasonable chance of achieving a desired end state.

The US military will need to be increasingly able to provide national leadership with sound military strategies developed—within tight political controls—while operating more effectively with allies and non-military agencies from both within the US and outside. Aerospace power will continue to develop as a potent element of military power; capabilities will overcome many current and foreseen constraints (e.g., the physical and moral limits on the application of the military instrument), and aerospace power will increasingly be viewed as the military instrument of first (and possibly only) choice among world democracies. Therefore, the US military, and principally the Air Force, must be able to execute decisive operations across the spectrum of conflict.

Future conflicts requiring the use of military power, while increasing in technological aspects, are likely to be more about application of sound strategy and operational art than maximizing operational effectiveness or employing new capabilities. Technological advances will provide increasing means for aerospace power to overcome constraints—most notably weather—providing attractive lethal and non-lethal means to achieve goals. However, it is difficult to understand if aerospace power, singly or predominantly, can achieve desired objectives in the face of increased restraints that, at best, reduce efficiency and, at worst, preclude its effectiveness. Warfare will remain an art form, not a science. Therefore, strategy provides more hope for a panacea than does technology.

This creates a strategy imperative in the face of rapidly changing technology, tactics, and restraints. The same level and intensity with which the Air Force pursues tactical expertise must be pursued at the operational level. This means the airman has got to be able to know what kind of war it is the US has to fight, whether or not the US can fight it, or whether the conflict at hand requires resolution by

other means. ALLIED FORCE demonstrated that the US military has not thought through all "how's," especially when a military component other than the land force functions as the supported commander for the operation at hand.

The study concludes that the immediate joint and USAF needs are for improvements to operational doctrine, training, and tools. The US military cannot focus exclusively on the war it would prefer to fight and ignore the complex realities of places like the Balkans or the ramifications of changes brought about by the revolution in military affairs. The study's conclusions are based on reviewing areas of benefit to military operations across the spectrum:

- Thinking about ways to improve national power integration is applicable in any conflict.
- Thinking about solving a conflict before the shooting starts by responding with capabilities that strengthen allies and friendly states and can easily transition if the shooting starts.
- Improving the ability to rapidly formulate a comprehensive systems blueprint of an adversary.
- Realizing the key to success in coercion, as with any strategy, is the ability to undermine the adversary's strategy.

However, limited conflict and limited force employment are sticking points that will continue to require work to overcome. Specifically, the US can only reduce military force so much before it must ask itself why it is considering resorting to force and what other means are available to resolve the conflict. The history of employing measures short of war points out that they take time to be effective. Yet the length of time involved is always a concern when the US is involved in a conflict, particularly if it resorts to force. There is a balance to be achieved between the desires of civilian leadership and what the military and aerospace power can reasonably be expected to deliver. The balance is most likely to be achieved in a civil-military environment of trust, cooperation, and coordination.

PREFACE

In August 1999 I attended the Aerospace Education Foundation Eaker Colloquy on "Operation ALLIED FORCE: Strategy, Execution, Implications" in Washington, DC. Former Air Force Chief of Staff General Michael Dugan was the moderator. I first met then-Major General Dugan, Tactical Air Command Deputy Commander for Operations, at the 1985 Strategic Air Command Bombing and Navigation Competition where my crew won the Best B-52 Crew honors. Later, as Chief of Staff, he presented the 1989 Mackay Trophy to my B-1 crew. I mention these events because General Dugan said something that day at the Eaker Colloquy that spoke to me as much as anything he said at our two previous meetings. He said, "I have grown to despise the word 'targeting.' Targeting is a terrific concept for the captain and for the sergeant. In my mind it is not a useful concept for the colonel and the general."[1] I admired General Dugan before. I admire him even more now. Let me explain.

I originally became interested in this research while assigned to Checkmate where I also came to despise the word "targeting" or, more specifically, "targets." This is not say that I disagree with Colonel Phillip Meilinger's aerospace power targeting "proposition."[2] But, it is to say the context in which airmen have often thought about and allowed others to think about targets has often misrepresented airmen as military professionals and the application of aerospace power as a military instrument—thinking about the desired political ends; possible military contributions to achieve those ends; possible aerospace power application within the military context; and lastly—finally—assigning appropriate targets. While we as airmen talk about how aerospace power is applied at the strategic and operational levels, we do not spend enough time as a service trying to understand applying force at those levels. We are tactical experts in putting bombs on target. However, in articulating

aerospace power's contribution to the overall campaign, "targets" must be the least used word in airman's dictionary; strategy must be the first and most important word in the airman's language—after all, "s" does come before "t."

The amazing potential and capability of aerospace power can only go unnoticed by those who willingly choose to ignore it. For the airman it is time to occupy a truly equal seat at the joint forces table. But to do so requires an adoption within our culture of the art of the application of military instrument of national power akin to the way airmen have historically embraced technology. It is not that technology will somehow cease to be at the core of aerospace power but, that for the airman, it is only the means to "support and defend the Constitution" by fighting and winning our Nation's wars. Just as we are adopting the Aerospace Expeditionary Force as the Air Force culture—breaking down stovepipes—we must embrace an operational art renaissance within that culture. We really have to understand what it means for the airman to serve as a "supported commander" and, most importantly, a "joint force commander" in theaters and environments where we have rarely had the opportunity to do so. General Dugan and others are working hard to this end.

A former Checkmate colleague used to comment about how we in the Air Force like to make things "bigger, faster, funnier." In other words, with a hint of sarcasm, he pointed out how we often like to improve the effectiveness of *things*. But to what end? The context is normally absent of thought about improving strategy. Although the two are related there is a difference related to order: Strategy comes first. Improved operational effectiveness can enhance strategy; new technology can change doctrine; but, thinking about how to win and thinking about how best to organize, train, equip, and employ forces are central. Strategy is concerned with differentiating ourselves from an

adversary. If I only seek to improve effectiveness of individual things I will never truly grasp what the contribution of such things is to formulating a coherent strategy that places the adversary, in Sir Basil Liddell Hart's words, "on the horns of a dilemma."

It is an encouraging time to be in the Air Force. The glass is half-full, not half-empty. In one way, we could be discouraged by the nature of the threats we face. Future scenarios in the lower end of the conflict spectrum will challenge some of our basic tenets such as centralized control-decentralized execution where technological capability will soon easily facilitate centralized control and execution at the highest levels. But, we cannot lose sight of the fact that we really still have to be ready for the larger challenges that we are going to increasingly be well equipped to handle. We must poise ourselves and embrace the following ideas: we will be called on for operations across the spectrum; operations within the near future will tend to be in the lower end of the spectrum; and our doctrine and the way we think about operations in the lower end of the spectrum are different. This should not cause us apprehension. If we are thinking about, articulating, experimenting, practicing, and educating on the best ways aerospace power can be employed, then we can confidently make recommendations and lead in those environments. We know aerospace power is relevant and we know that we will continue to face challenges to certain kinds of capabilities that we do not have. But at the same time if we keep the big picture in mind about how we are used as an instrument to achieve a political end then we can think in terms about how we can best be applied.

In a general sense, it is time to move on from the half-empty glass notion of searching for service identity. And at the same time, it is not aerospace power versus everybody else. Much of the criticism of the Air Force is about the dependence and focus on technology. Yet, we

know that is what aerospace power is. I've used the comparison before: All warfare except that of brute hand-to-hand combat is about exploiting technology or the adversary's dependence on technology. Yet at the same time, if you always allow technology to be your focus there will be a fundamental problem with understanding the importance of why you have all these means to exploit warfare in the third dimension. That is why we need to pursue and continue to exploit technology, particularly as we go into space. But if we fail to understand and think about how those "things" that make up aerospace power can be applied to achieve political ends, then that's where we will warrant criticism on the pursuit of technology only. It is time to think in terms of what the military can bring, in terms of management of violence to achieve the ends. Then, under that joint umbrella, determine what aerospace power can bring to the table. Former Air Force Chief of Staff, General Merrill A. McPeak brilliantly described the "joint" airman's perspective:

> Few airmen today believe that the Air Force suffices to secure the nation's interests. Korea, Vietnam, Desert Storm, and much other experience has accustomed us to combat formations in which land, sea, and air arms unite under joint command. We stake no claim to win all wars, all the time, all by ourselves, and neither does the Army or Navy. At any rate, it is a ridiculous, unreasonable test that any service should have to win by itself. But somehow our modesty in this regard has metastasized into something else—the theory that air power can never win alone, that under no conditions should we rely on air power to achieve victory. The integrity of this proposition has been damaged as badly as Serbian ambitions.[3]

A few words about what this paper does not do. This paper does not examine the reasons, factors, or the attributes of employing force or military capability, particularly in the lower end of conflict spectrum, by our political leadership. This paper does not propose changes to the existing National Security Strategy or National Military

Strategy by advocating whether operations in the lower end of the conflict spectrum should be conducted. I want to make an argument that applies regardless of available resources or national security or military strategies. Knowing the adversary and applying strategy-to-task methodology and operational art are the main thrust areas. With those in mind, it is not hard to see that the more challenging strategic and operational thinking is at the lower end of the spectrum.

It does not presume or argue that keeping land forces out of any conflict is the right thing to do. However, to contemplate the potential of aerospace power to be used predominantly requires a sober appreciation of our limits: What do we actually have the capability to do?

This paper does not address ethical dimensions of a political decision to get involved in a conflict, other than the dimension of being able to discern if political restraint is unacceptable. It does not analyze casualty aversion in depth. I assume that part of the military ethic is to minimize casualties as a course of duty, but not as the preeminent duty. The "gap" that exists between traditional military doctrine and that at the lower end of the conflict spectrum is there because it lies in an area that traditionally runs contrary to accepted military principles and, potentially, ethics. A potential ethical dilemma already being raised has to do with paramilitary operations against aerospace power-only operations. If asked to do something like Operation ALLIED FORCE again there are ethical dimensions to accepting similar consequences on the ground such as the Kosovars experienced. As a result the key question from our senior military leaders may not be "if" we <u>can</u> do what is asked, but "whether" we <u>should</u> do what is asked.

With regard to ethics, personally what is happening is disturbing. There are attempts to chip away at the core of the military ethos. This is why I believe it is imperative to understand not only the "if/whether" question, but to understand everything we contribute in

terms of national power short of force application to resolve a crisis. Then, after applying the full potential of all possible measures and not achieving resolution, resort to force and apply it with all possible vigor, not ceasing until resolution is achieved. However, this is a subject of another project. Again, I assume we have already worked through those issues and have accepted the restraints, believing that a certain military response will contribute to achieving the desired end state.

I have tried to examine what has occurred and then attempt to draw conclusions about the important factors that should be considered if something like Operation ALLIED FORCE is done again. I do seek to include in my assessment those aspects, which would not otherwise detract from military performance across the spectrum of conflict.

Finally, I want to thank two thoughtful airmen of note for their invaluable advice and consultation: Dr. Earl Tilford of the Army Strategic Studies Institute and Colonel Phillip Meilinger of the Naval War College. Both helped me to examine aerospace power from a variety of perspectives. Many thanks are also in order for Mr. Christopher Makins, Dr. Alfred Wilhelm, and the staff of The Atlantic Council of the United States for providing an outstanding environment in which to think, talk, and write about national security policy issues. I want to offer special thanks to those who allowed me to interview them, particularly General John Jumper, Major General Thomas Hobbins, and Brigadier General (select) Alan Peck. Lastly, I want to thank my mentor and friend, Colonel Kevin Kennedy, for keeping the Checkmate door open to me for research.

For by wise guidance you will wage war, and in
abundance of counselors there is victory.
Proverbs 24:6 (NASB)

[1] General Michael J. Dugan, USAF (ret.), "Operation ALLIED FORCE: Strategy, Execution, Implications," address, Eaker Colloquy on Aerospace Strategy, Requirements, and Forces, Washington, DC, 16 August 1999, 1; on-line, Internet, 2 September 1999, available from http://www.aef.org/eak16aug99.html.
[2] See Phillip S. Meilinger, *Ten Propositions Regarding Air Power* (Washington, DC: Air Force History and Museums Program, 1995).
[3] General Merrill A. McPeak, USAF (ret.), "The Kosovo Result," *Armed Forces Journal International*, September 1999, n.p; on-line, Internet, 26 October 1999, available from http://www.afji.com/mags/1999/september/thekosovoresult/index.html.